

VOLTAGE BOOSTING CIRCUIT AND METHOD OF GENERATING BOOSTING  
VOLTAGE, CAPABLE OF ALLEVIATING EFFECTS OF HIGH VOLTAGE STRESS

ABSTRACT OF THE DISCLOSURE

5           A voltage boosting circuit and a method of generating a boosting voltage alleviate  
deterioration of a driver transistor caused by high voltage stress when the level of an external  
supply voltage is high. The voltage boosting circuit includes boosting capacitors and  
switches. The boosting capacitors include a first boosting capacitor connected to a driving  
node and a last boosting capacitor that outputs the boosting voltage. The switches connect  
10 the boosting capacitors in series in response to a control signal. The boosting voltage  
increases or decreases as the voltage level at the driving node changes according to the logic  
state of a boosting level control signal. The boosting level control signal is responsive to the  
external supply voltage level. An external supply voltage detector detects the level of  
external supply voltage level and generates the boosting level control signal.